NCSM Journal

of Mathematics Education Leadership

FALL 2015 VOL. 16, NO. 2

National Council of Supervisors of Mathematics www.mathedleadership.org

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Lessons from the Field: Challenges We Face When Coaching Teachers

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Abstract

In this article, we highlight three of the common challenges that many coaches have experienced in one form or another: seeking administrative support for coaching teachers; working with teachers who are resistant or reluctant; and moving beyond demonstrating lessons. Each challenge has its unique set of circumstances that present possible opportunities for the coach to capitalize on and further support teachers' daily work. We use these particular examples to provide the reader with opportunities to examine and reflect on situations coaches might encounter.

Introduction

Many school districts have hired mathematics coaches to support teachers' ongoing professional learning (Grant & Davenport, 2009; Killion, 2008; York-Barr & Duke, 2004). Whether they work part-time or full-time (McGatha, 2010; Reys & Fennell, 2003), coaches engage teachers in professional development, monitor assessment practices, and more generally, help to implement the school improvement plan for mathematics instruction in the school building. Throughout their careers, they continue to develop a unique set of knowledge and skills that enable them to do this work (Campbell & Ellington, 2013; Campbell & Malkus, 2011). Their work with individual teachers is particularly important and necessary in order to support teachers' learning about teaching and students (Knight, 2011; Moreau & Whitenack, 2013).

In our state, we offer a graduate program for teachers that provides an in-depth study of mathematics and mathematics educational leadership to prepare them as mathematics coaches (also known by others as mathematics specialists, instructional coaches, mathematics assessment specialists, and so on). In this program, the teachers complete five mathematics classes, three educational leadership classes, and a field-based research project that focuses on their work as coaches. These courses provide teachers with opportunities to explore the range of roles and responsibilities they might have. For instance, one of the leadership courses focuses exclusively on coaching individual teachers. (For more information about this program and the different courses offered, please see: http://www.vamsc.org/index2.html.)

As teachers have moved through this program, we have followed them, and have noticed that they sometimes faced unique challenges as they transitioned into their new roles. In some instances, the challenges were anticipated, and in other instances, they were not (Donaldson et al., 2008; Knight, 2009). In this article, we explore in detail some of these unanticipated challenges that coaches faced as they were learning how to support teachers' daily work.

We will address three challenges: seeking administrative support for coaching teachers; working with teachers who are resistant or reluctant; and moving beyond demonstrating lessons. We provide vignettes of actual situations that highlight each of the three challenges. (Each individual

that we feature in the vignettes was trained in the previously described program and is currently serving as a mathematics coach. Each is assigned full-time to one school building and has a primary focus of providing daily in-school professional development for teachers.) After presenting each vignette, we provide some possible ways that the mathematics coach might address the particular challenge.

Three Challenges

Each challenge that we present was identified through our observations and interviews with different mathematics coaches. Each of the coaches encountered all of these challenges in one form or another. However, the vignettes that we present here highlight particular key issues associated with each of these challenges as they were experienced by one of the mathematics coaches. These vignettes bring to the fore some of the unique ways that the mathematics coach addressed these challenges.

Challenge 1: Seeking Administrative Support for Coaching Teachers

Knight (2011) suggested that school buildings should be places that everyone is "actively engaged in professional growth, with the principal being the first learner" (p. 20). By working together, having regular planned meetings, the principal and the mathematics coach can develop a shared view about how to meet common goals for the school mathematics program (Knight, 2006).

There are many ways that the principal can assist the mathematics coach whether the mathematics coach is new to the position or the school or a long time member of the school's instructional team. For instance, the principal might spend part of one of the teachers' meetings at the beginning of the school year introducing the mathematics coach. During this meeting, the principal can share what the mathematics coach's responsibilities will be as well as provide opportunities for teachers to ask questions and become more familiar with the different ways they might collaborate with the mathematics coach (Inge, Arco, & Jones, 2013). As another example, when developing a professional development plan with individual teachers, the principal can suggest that teachers work one-on-one with the mathematics coach (Knight, 2011). As the principal, teachers, and the mathematics coach work together, they can develop a shared view of what the mathematics coach's responsibilities are in the school building (Knight, 2011). When there is not a clear understanding of the mathematics coach's responsibilities, however, the coach may have difficulty successfully engaging in her daily work with teachers. The vignette that follows illustrates one of the challenges a mathematics coach, Ms. Jenkins, encountered with the principal regarding her changing role during the school year as the school prepared for high-stakes testing.

Vignette 1. Ms. Jenkins' work changed during the second part of the school year. At the principal's request, instead of working with teachers in their classrooms, she worked with a range of students in a pull-out, intervention program to prepare them for the state-mandated tests. She needed to renegotiate her responsibilities with the principal so that she might more effectively work with teachers throughout the school year. Here is Ms. Jenkins' story.

> *Ms. Jenkins had been a teacher in this urban school district for several years, but this was her first year as a mathematics coach in a new school building. Over the past several years, this school received a passing score in mathematics from the state department, because its students met all of the expectations for the end-of-the-year state tests. As a result, Ms. Jenkins did not believe her role should focus heavily on assessment. Instead, she wanted to help teachers further learn about and develop their instructional practices. She worked with individual teachers, co-taught lessons, planned instruction, and conducted vertical and grade-level meetings. She used parts of these meetings not only to discuss logistical issues around testing and curricular frameworks, but also to engage teachers in advancing their own understanding of mathematics by exploring mathematical topics through problem solving.*
>
> *Ms. Jenkins believed that she and her principal shared the same goals for the school's mathematics program and the same view of the role of the mathematics coach within the school. She worked hard at coaching individual teachers, developing activities, and meeting with teachers. Interestingly, the work that she had begun during the first half of the school year came to an abrupt halt after winter break.*
>
> *When she returned from winter break, her school building principal asked her to begin preparing third, fourth, and fifth grade students for the state tests. Specifically, Ms. Jenkins was asked to develop weekly practice tests for each of the grade levels. These tests consisted of problems that matched the different skills and knowledge that students needed to pass the state tests.*

Ms. Jenkins scored these tests and identified students who did not give correct answers to test items. At the principal's request, students who did not receive a perfect score on these practice tests were pulled from their classrooms for remediation sessions conducted by Ms. Jenkins. Even students who typically scored exceptionally well on assignments and tests were pulled from regular class instruction to attend these remediation sessions. In some cases, Ms. Jenkins worked with several students at a time; in other cases, she worked with larger groups of students. How pervasive was this shift in the building? The principal requested that each teacher post the practice test results for their class by subject area beside each teacher's classroom door. These scores were in full view for all to see.

Discussion. When thinking about Ms. Jenkins' challenge, it is helpful to review the different responsibilities of mathematics coaches. We list a few here, as outlined by Inge, Arco, and Jones (2013, p. 241):

- work with administrators, teachers, students, parents, and the community to reach common mathematics goals;
- collaborate with individual teachers and teams of teachers through co-planning, co-teaching, and coaching;
- collect and analyze data in an effort to improve student achievement as well as mathematics curriculum and instruction;
- promote successful, research-based instructional strategies;
- assist in aligning curriculum and assessment resources to support and increase student achievement;
- conduct non-evaluative observations of teaching and learning to improve student achievement and mathematics instruction; and
- provide mathematics leadership that stimulates sustained systemic change and improvement in mathematics instruction.

As revealed by this list, the mathematics coach has many different responsibilities that support the school mathematics program and student learning of mathematics for understanding. Ms. Jenkins viewed her work as encompassing all of these responsibilities.

By mid-year, though, her views differed markedly from the views of the principal. Ms. Jenkins' challenge was to speak with the principal about her responsibilities as a coach. During the second half of the school year, she had few, if any, opportunities to work with individual teachers. How could she help the principal understand how important it was for her to coach individual teachers? Additionally, how could she convince the principal to let her return to her plan for the mathematics program for the building?

Let us begin with how Ms. Jenkins might have addressed her concerns. First, Ms. Jenkins needed to decide what information to prepare for the principal about the extent to which the principal's testing preparation plan, that is, the common assessments, were effective (Confer, 2006; Love, 2009; Walston & Overcash, 2013). Did these assessments help all students be more prepared for the test? If she determined that not all students benefitted, she would need to develop a plan for how to communicate her findings with the principal (e.g., Walston & Overcash, 2013).

In proceeding, Ms. Jenkins decided to look carefully at the student results from the practice tests. Because she had access to the different practice test scores for each of the grade levels, she analyzed this information to determine if this approach worked for all of the students. As she analyzed the test scores, to her surprise, Ms. Jenkins found some discrepancies. First, African Americans and other minority students were not scoring well. In other words, the trends across the practice test scores for different subgroups revealed that not all students were benefiting from this approach (cf. Darling-Hammond, 2007; Lewis, 2007; Suurtamm, 2012). Additionally, the analysis led Ms. Jenkins to ask new questions. Would gaps among different subgroups actually become more pronounced overtime? Could this school become one of the failing schools? By voicing these more general concerns when she met with the principal, she could perhaps make an even stronger case for why the test preparation procedures were not helping all students. She might suggest that they use these results to plan for her work with teachers, for example, using both high-stakes assessments and formative assessment practices (Walston & Overcash, 2013).

Once she gathered information about the practice tests (Confer, 2006; Inge, Walsh, & Duke, 2013; Knight, 2007), she was prepared for her meeting with the principal at the end of the school year. Prior to the meeting, she let the

principal know that she would like to share results about the practice tests. She also planned to propose and further develop a plan with the principal that also included formative assessments for how to work with teachers and their students for the upcoming year (Inge, Walsh, & Duke, 2013).

As it turned out, Ms. Jenkins and the principal had the opportunity to discuss these issues during their meeting at the end of the school year. Unfortunately, they could not agree on the emphasis for Ms. Jenkins' role—coach of teachers versus high-stakes test preparation for students. Ms. Jenkins was at a crossroads. She could remain a coach in this building for the upcoming year and make plans to meet this challenge or she could request to be transferred to another school that might be a better fit for her. Perhaps there were other options that she had not yet considered?

One final point is worth noting here. Had Ms. Jenkins and the principal approached their differing views about the mathematics coach's responsibilities early on and developed a plan that worked for both of them, Ms. Jenkins may not have faced this challenge as the school year progressed. Of course, she may have needed to compromise with the principal in order to accomplish their common goals for the school mathematics program (Inge, Walsh, & Duke, 2013).

Challenge 2: Working with Teachers Who are Resistant or Reluctant

There are relevant points to consider on both sides that might explain why teachers are resistant or reluctant to working with mathematics coaches. On one side, teachers may appear resistant to suggested changes because they do not view the coach as an expert. For instance, they may have difficulty embracing a fellow teacher in a leadership role, particularly if the coach has less classroom experience (Donaldson et al., 2008). In response, a mathematics coach may adapt her role and responsibilities to such an extent that she is not able to effectively work with teachers—what Killion (2008) referred to as coaching light. On the other side, teachers may have justifiable reasons for resisting change. For instance, they may believe that the changes suggested by the mathematics coach are not reasonable or doable (Knight, 2009).

In the vignette that follows, it is not clear which of these two positions best describes Ms. Brooks' challenge. Not knowing why she faced the degree of resistance that she did played a part in how she was able to work with some teachers, particularly those teachers who taught third grade.

Vignette 2. Ms. Brooks faced a difficult situation. Since the beginning of this, her second year as a mathematics coach at this school, her working relationship with the third-grade lead teacher prevented her from working with the other teachers at this grade level. As a result, two third-grade teachers had difficulties that neither they nor Ms. Brooks could have anticipated. Once Ms. Brooks became aware of the circumstances, she offered to help these teachers provide additional support for their students. Here is her story.

For reasons that she could not identify, the third-grade lead teacher would not collaborate with Ms. Brooks. She did not invite Ms. Brooks to attend grade-level planning meetings or to visit her classroom during mathematics instruction. In fact, Ms. Brooks had very few opportunities to work with the teachers in third grade.

Of course, Ms. Brooks was concerned because third grade was a crucial year for mathematics instruction. Students needed to perform well on the state tests. Additionally, this particular school year, there were two teachers, Ms. Baker and Ms. Smith, both of whom had not taught third grade before. Also, they were first-year teachers who were new to this school building.

One day, Ms. Brooks stopped by Ms. Baker's classroom and noticed that Ms. Baker was sitting in the dark alone, visibly upset. As she talked with Ms. Baker, she realized that Ms. Baker was upset because she had just attended a meeting with the principal and assistant principal about her poor job performance. As they continued to talk, Ms. Brooks told Ms. Baker that she would work with her as often as she would like to help her with her mathematics instruction. Ms. Brooks assured Ms. Baker that "she had her back." Later, she also mentioned to the principal that she and Ms. Baker had decided to work together. She wanted to assure the principal that Ms. Baker was agreeable to doing this and she even hinted that Ms. Baker had initiated the discussion about working together.

Ms. Brooks and Ms. Baker began planning for the next week's lessons. During their first planning meeting, she realized that Ms. Baker did not know anything about the curriculum framework—a guide that all teachers in the school district were expected to follow as they planned for the content they would cover throughout the school year. The lead teacher had not shared this information with her new teachers—one of the lead teacher's responsibilities.

It was now the middle of the school year. Essentially Ms. Baker (and Ms. Smith) had not adequately prepared her students for the upcoming state tests nor had she covered the material in the curriculum framework that was scheduled for the first half of the school year.

Ms. Brooks mentioned that the lead teacher should have provided the framework to Ms. Baker and Ms. Smith. Once Ms. Baker realized that the lead teacher had not provided the curriculum framework, she mentioned this fact to Ms. Smith. Ms. Smith immediately approached Ms. Brooks and asked if she could join the meetings with Ms. Baker to plan for mathematics instruction.

Ms. Brooks worked with Ms. Baker and Ms. Smith several times each week. As she planned with them, they collaboratively determined what content they had already covered and what content they still needed to cover before the upcoming state test. Ms. Brooks also made suggestions about how to implement different activities, co-taught and modeled lessons, and debriefed about the lessons.

The trio continued to plan throughout the rest of the school year. Although, they had a great deal of catching up to do, through their hard work, they were able to help their third-grade students learn some of the important ideas that they had not addressed previously. They also worked towards the common goal of preparing the students for the state test.

Discussion. Ms. Brooks' challenge was to determine where the breakdown in communication occurred and to make a plan to ensure that this type of situation did not arise again. How should she handle this situation? Should she communicate with the lead teacher? In addition, she had another dilemma. Should she break with tradition and approach the principal about this situation? And importantly, how could she use this opportunity to begin building a working relationship with the third-grade lead teacher?

If she decided to speak with the principal about this situation she would jeopardize her working relationship not only with the teachers involved but also with all of the teachers in the building (Inge, Arco, & Jones, 2013). She needed to address this issue and do so carefully.

Her first priority was to find a way to work with the third-grade lead teacher (cf. Moreau & Whitenack, 2013). What strategies might she employ? For one, she could invite the lead teacher to these planning sessions. If the lead teacher attended the planning meetings, Ms. Brooks could ask her to interject or offer additional suggestions from time to time. As another possibility, Ms. Brooks could have informal conversations with the lead teacher about some of the issues that they were addressing in the sessions. She might talk about what she was learning about effectively working with these new teachers. By doing so, Ms. Brooks would communicate that she respected the lead teacher's important role and at the same time provide opportunities for the lead teacher to consider new approaches when working with these novice teachers. By taking this tactic, Ms. Brooks could help the lead teacher to develop leadership skills (Zeller, 2006). Further, Ms. Brooks could explore other strategies if these attempts were unsuccessful. If need be, she could invite the principal and all of the third-grade teachers to the planning sessions to foster their collaborations and ultimately improve their working relationship.

When working with reluctant teachers such as the lead teacher in this vignette, it is important to understand why they might be resistant (Knight, 2009; Sheffield, 2006). As Knight argued, teachers may have very legitimate reasons for being resistant. The mathematics coach has the task of uncovering the teacher's concerns and reasons for apprehension. Sometimes simply offering to help, providing additional resources, finding ways to communicate (e.g., dropping by the classroom or sending an email), or even helping with bus duty can initiate a new collaborative, working relationship that is built on trust and mutual respect (Minervino, Robertson, & Whitenack, 2013; Sheffield, 2006).

As an aside, Ms. Brooks learned a lot as a consequence of her experiences with the third-grade teachers. She needed to monitor teachers' progress more closely even if she did not work with them regularly. When necessary, she needed to seek the principal's support when she faced resistance or reluctance from teachers. By making expectations explicit about working with the mathematics coach, for instance, the principal could eliminate these types of situations from occurring or at least prevent them from continuing for long (e.g., Inge, Walsh, & Duke, 2013).

Challenge 3: Moving Beyond Demonstrating Lessons

The third theme, moving beyond demonstrating lessons to support changes in teachers' practices, is another important challenge that a mathematics coach may face. To more effectively support teacher learning, the mathematics coach needs to provide opportunities for teachers to take on more and more of the teaching responsibility when they are working in the classroom together (Feiler, Heritage, & Gallimore, 2000; Killion, 2008).

When coaching individual teachers, some mathematics coaches model lessons for an extended period of time. This approach can be problematic and limit the extent to which teachers are able to explore new practices (Killion, 2008). This is not to say that demonstrating lessons should not be a part of the work. In fact, modeling lessons is a common coaching strategy that mathematics coaches use when working with both new and experienced teachers (Knight, 2007; Moreau & Whitenack, 2013; Silbey, 2006; West & Staub, 2003). It is important, however, that over time the coach takes less and less of a role during regular instruction when working with teachers. In fact, some suggest that the coach needs to move to co-teaching or observing the teacher after modeling two or three lessons (e.g., Knight, 2007; Silbey, 2006).

The coach and teacher's work during the lesson is only part of the story. In addition to co-planning and co-teaching the lesson, the coach and teacher need to spend time afterwards debriefing about the lesson. Each of these aspects of their work is important. In fact, planning, implementing, and debriefing about the lesson are all part of the coaching cycle—an important process in which coaches and teachers engage to support teachers and their students' learning. This cycle has been talked about extensively (e.g., Campbell, Ellington, Haver, & Inge, 2013; Felux & Snowdy, 2006; Knight, 2007; West & Staub, 2003). All three parts of the cycle are a critical part of the coach's work with teachers. In this third and final challenge, Ms. Johnson faced this challenge of moving beyond demonstrating lessons.

Vignette 3. It can be challenging to capitalize on opportunities to encourage the teacher to take a more active role in exploring new approaches. This was the case for Ms. Johnson. She found it difficult to help the mathematics teacher, Ms. Brady, try new instructional strategies when they worked together. Here is her story.

> *Ms. Johnson worked in a small school with only two teachers at each grade level. Third, fourth, and fifth grades were departmentalized, so one teacher, Ms. Brady, provided all mathematics instruction for each of these grades. By working with Ms. Brady, Ms. Johnson had the opportunity to affect mathematics instruction for all of the upper grades. Additionally, she was able to manage her time more easily so that she could work with Kindergarten, first-grade, and second-grade teachers who provided mathematics instruction for their own students. As such, Ms. Johnson was able to support mathematics instruction in the entire school building by working with only seven teachers.*[1]
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> *During Ms. Johnson's first year as a mathematics coach, she worked with Ms. Brady on a regular basis. She and Ms. Brady worked well together and briefly planned before co-teaching lessons. However, because of time, Ms. Johnson was not able to employ the entire coaching cycle regularly. Usually, when Ms. Johnson visited, she taught parts or all of the lessons while Ms. Brady interjected or monitored students' independent or small group work. Sometimes they made spontaneous decisions about the lesson as the students worked independently. Other times they facilitated whole class discussions together as students presented their ideas.*
>
> *During her second year of working in this school building, Ms. Johnson had less opportunity to work regularly with Ms. Brady. When they did not work together, she noticed that Ms. Brady used worksheets more and more often.*

[1] Ms. Johnson's arrangement is quite different from mathematics coaches in larger, suburban or urban school districts where the mathematics coach may be responsible for mathematics instruction for 20-40 teachers in the school building. Mathematics coaches in larger school settings have different sets of challenges when it comes to supporting the work of all teachers of mathematics. They may rarely have a block of time free. The tradeoff comes in the kinds of supports that Ms. Johnson has in comparison to her counterparts in suburban or urban settings. She does not have many opportunities for professional development and does not report to a mathematics coordinator or supervisor housed in the district office. The few chances that she has to work with others comes in the form of collaborating with mathematics coaches in other schools or districts that are close in proximity. So although she works with fewer teachers, she has few opportunities to participate in professional development activities that would allow her to develop or refine her coaching skills. To this end, it is quite remarkable that she continues to grow and deepen her understanding—which attests to the knowledge, skill, and motivation she brings to her work.

The lessons were sometimes procedural, with less focus on understanding the mathematics behind the different procedures students learned. Ms. Johnson was concerned because she was not sure that her work with Ms. Brady was as productive as it could be. Even when she and Ms. Brady co-taught lessons, Ms. Johnson continued to model the lessons and they were not able to plan or talk about their work together. Ms. Johnson was limited in the amount of time she and Ms. Brady had to plan and debrief. How could she move Ms. Brady to the next level? How could she effectively employ the coaching cycle as she worked with Ms. Brady? What could she do to support Ms. Brady's reflective practice?

Discussion. Ms. Johnson's challenge in this working relationship was a result of the little time she and Ms. Brady had to talk about and plan for instruction. When they were able to work together, Ms. Johnson continued to model the lessons and, in effect, was not able to provide opportunities for Ms. Brady to explore new forms of practice. As a consequence, Ms. Brady resorted to old practices, ones that are less effective in preparing students for the state tests. As a result, students were developing a view of mathematics that did not include problem solving, but instead, featured deriving right answers.

How could Ms. Johnson better support Ms. Brady's work? What were some strategies that she could use to help Ms. Brady take ownership of reform-based instruction? Since Ms. Brady was the only upper level teacher teaching mathematics, Ms. Johnson could not use grade-level meetings to address this issue. She could, however, hold vertical team meetings with all of the teachers (Domalik, Hodges, & Jaeger, 2013). During these meetings, she could plan problem-solving activities for the teachers and use them to engage teachers in discussions about their thinking and their solution strategies, as well as develop targeted goals across and within grade levels (Domalik et al., 2013; Doyle & Standley, 2013). She could also use these opportunities to model different strategies for conducting class discussions, highlighting children's ideas, and/or facilitating student learning.

Additionally, Ms. Johnson could develop a different action plan for her work with Ms. Brady. First, she and Ms. Brady needed to find a time to plan together—the first part of the coaching cycle (Knight, 2007; West & Staub, 2003). If they could not find time during the regular school day, they may have needed to meet before or after school. If Ms. Brady was not able to meet because of other school or personal responsibilities, the coach will need to be creative. In this particular school, for instance, because Ms. Brady taught all of the third, fourth, and fifth grade sections of mathematics, Ms. Johnson might capitalize on this arrangement to develop a modified version of the coaching cycle. They would still need to meet during lunch or some other free time during the day to plan for an upcoming lesson. During this meeting, they would plan the lesson by exploring the mathematics, developing or adapting activities, and crafting good questions for the whole class discussion. Ms. Johnson could offer to model parts of the lesson when teaching the lesson to the first group of students and then discuss how their roles might change as they teach the lesson for the second or third groups of students at other periods during the day. After co-teaching the lesson to the first group of students, the coach and teacher would also need to have a brief discussion between classes about what worked and what they need to change.

Ms. Johnson would need to take a lesser role in co-teaching the lesson to the second (and third) groups of students; she should encourage Ms. Brady to teach the main part of the lesson or to conduct the whole class discussion (Silbey, 2006; West & Staub, 2003). By the third time they co-teach the lesson, Ms. Johnson could take a minimal role during the lesson—and assure Ms. Brady that she is there to help if need be (Silbey, 2006; West & Staub, 2003).

Ms. Johnson and Ms. Brady will also need to find time to debrief about the lesson, perhaps during lunch or some other time during the next school day (Moreau & Whitenack, 2013; West & Staub, 2003). By making good use of Ms. Brady's teaching schedule, they can develop a modified version of the coaching cycle—an approach that should work well for both Ms. Johnson and Ms. Brady.

Conclusion

We have provided three different challenges that mathematics coaches may face in their work. We also provided several ways in which they could be addressed. Although we recognize that there may be other ways to address these challenges, we encourage the reader to consider the vignettes as starting points for devising other ways that they might be effective as they work with teachers. Considering real-life examples such as the ones that we have presented is important. Mathematics coaches can benefit from having opportunities to explore different options and anticipate possible outcomes as a way of

helping them expand their knowledge and skills related to their work. Our intent is that the reader will use these vignettes for exploring in more detail how a mathematics coach might further develop the actions outlined in these scenarios. Additionally, we encourage the reader to identify and resolve other challenges that the mathematics coach might face using a similar exploratory process. As the reader does so, he or she can develop new insights into how the mathematics coach can meet a challenge and at the same time effectively support teachers and their students. ✪

Funded by the National Science Foundation Grant Nos. DRL-0918223 and DUE-041234. The opinions expressed here are those solely of the authors and do not reflect the opinions of the funding agency.

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